

WHAT IS CLAIMED IS:

1. A deposited film forming apparatus comprising a reaction vessel capable of hermetic evacuation, a holding member for holding a substrate in the vacuum vessel, a source gas supply means for supplying a source gas, and a power supply means for introducing a high-frequency power, the apparatus comprising an end covering member provided at an end portion of each of the substrate holding member, the source gas supply means, and the power supply means.
2. The deposited film forming apparatus according to Claim 1, wherein the end covering member is constructed so as to be detachable from the reaction vessel.
3. The deposited film forming apparatus according to Claim 1, wherein the frequency of the high-frequency power is in the range of 50 MHz to 450 MHz.
4. The deposited film forming apparatus according to Claim 1, wherein there is a clearance of not less than 1 mm between the end covering member and the substrate holding member, the source gas supply means, or the power supply means.
5. The deposited film forming apparatus according to Claim 4, wherein the clearance is not more than 5 mm.
6. The deposited film forming apparatus according to Claim 1, wherein at least a part of a surface of the end covering member has a surface roughness (Rz) in the range of 20  $\mu\text{m}$  to 70  $\mu\text{m}$ .
7. A deposited film forming apparatus comprising a reaction vessel capable of hermetic evacuation, a holding member for holding a substrate in the reaction vessel, a source gas supply means for supplying a source gas, and a power supply means for introducing a high-frequency power, wherein an end portion of each of

the substrate holding member, the source gas supply means, and the power supply means is placed outside an area of a glow discharge.

8. The deposited film forming apparatus according to Claim 7, wherein the placement outside the area of the glow discharge is achieved by disposing an end covering member at the end portion of each of the substrate holding member, the source gas supply means, and the power supply means.
9. The deposited film forming apparatus according to Claim 8, wherein the end covering member is constructed so as to be detachable from the reaction vessel.
10. The deposited film forming apparatus according to Claim 7, wherein the frequency of the high-frequency power is in the range of 50 MHz to 450 MHz.
11. The deposited film forming apparatus according to Claim 8, wherein there is a clearance of not less than 1 mm between the end covering member and the substrate holding member, the source gas supply means, or the power supply means.
12. The deposited film forming apparatus according to Claim 11, wherein the clearance is not more than 5 mm.
13. The deposited film forming apparatus according to Claim 8, wherein at least a part of a surface of the end covering member has a surface roughness (Rz) in the range of 20  $\mu\text{m}$  to 70  $\mu\text{m}$ .
14. A deposited film forming method which uses a reaction vessel capable of hermetic evacuation, a holding member for holding a substrate in the reaction vessel, a source gas supply means for supplying a source gas, and a power supply means for introducing a high-frequency power, the method comprising inducing a glow discharge by the high-frequency power to decompose the source gas

introduced into the reaction vessel, thereby forming a deposited film on a substrate held by the substrate holding member, wherein the deposited film is formed with an end portion of each of the substrate holding member, the source gas supply means, and the power supply means being placed outside an area of the glow discharge.

15. The deposited film forming method according to Claim 14, wherein the placement outside the area of the glow discharge is achieved by covering the end portions.

16. The deposited film forming method according to Claim 15, wherein the covering is effected by use of an end covering member.

17. The deposited film forming method according to Claim 15, wherein covering the end portions is effected by an end covering member which is detachable from the reaction vessel.

18. The deposited film forming method according to Claim 14, wherein the frequency of the high-frequency power is in the range of 50 MHz to 450 MHz.